IV. Obſervationes Sinenſes, Communicatæ à D. Jacobo Caſſini Acad. Reg. Par. Soc.

MIſſum eſt nuper à Patribus Societatis Ieſu in Regia Pekinenſi domicilium habentibus exemplar nonullarum obſervationum ibi habitarum ad ſitum illius Urbis determinandum conferentium.

Ex altitudine meridiana maxima ſtellæ polaris obſervata Die 31 *Decembris*, 1694. *correcto inſtrumento graduum* 42. 16. 50″. *Suppoſita refractione* 1′. 17″. *et diſtantia ſtellæ polaris a polo tunc temporis gr.* 2. 19. 57″. *eruitur altitudo poli gr.* 39. 54. 56.

Ex ejuſdem ſtellæ polaris altitudine meridiana minima obſervata Diebus 7, 8. 13 *Maii*, 1695. *correcto inſtrumento graduum* 37. 36. 40″. *ſuppoſita Refractione* 1′. 28″. *& diſtantia ſtellæ polaris a polo gr.* 2. 19. 50. *eruitur altitudo poli gr.* 39. 55. 2.

Neglecta Refractione altitudo maxima ſtellæ polaris deducta ex obſervatione 31 *Decembris præcedentis fuiſſet ſub initium Maii gr.*	42.	16.	43.
Et altitudo ejuſdem minima tunc fuit gr.	37.	36.	40.
Quare differentia altitudinum	4.	40.	3.
Et diſtantia ſtellæ polaris a polo	2.	20.	1.
Et altitudo poli apparens	39.	56.	41.
Ad hanc altitudinem apparentem refractio ex mea Tabula eſt		1.	10.
Quare altitudo poli in Regia Pekinenſi	39.	55.	30.

Plures aliæ obſervationes altitudinum meridianarum ſtellarum fixarum in hunc uſum habitæ ſunt ; ſed hæ mihi videntur omnibus præferendæ.

Pro longitudine Pekinenſis Urbis obſervatæ ſunt plures immerſiones primi Jovis ſatellitis in Jovis Umbram ex quibus ſelegi quæ habita eſt die 18 *Januarii*, 1695. *Teleſcopio pedum duodecim.*

Eo die obſervata eſt immerſio primi Jovis ſatellitis in Jovis Umbram facta correctione horologii h. 12. 51. 14.

Tabulæ noſtræ eo die hanc immerſionem repreſentant h. 5. 18. 49. *Obſervationes autem eodem menſe habitæ in obſervatorio Regio Pariſienſi oſtenduut. Tabulas retardaſſe tunc temporis minutis horariis* 2'. 30''.

Quare fuit illa immerſio Pariſiis h. 5. 16. 19. *Itaque differentia meridianorum.*

*Inter Pekinum & Urbem Pariſienſem erit h.*7. 34. 55.

Cum autem ex aliis obſervationibus olim deducta fuerit eadem meridianarum differentia 7'. 36. *ſumi poterit h.*7. 35 ½.

V. *A Letter from Dr.* Geo. Garden, *Dated* Aberdeen, Dec. 8, 1686. *concerning Caterpillars that deſtroy Fruit.*

I Had Occaſion ſome Years ago to diſcover the true Origine of the ſmall Catterpillar, which infeſts the Bloſſoms of Pears and Apples, and deſtroys the Fruit. You know the vulgar Conceit was, their being bred of Miſts and Dews, which *Goedartius* goes along with, but Dr. *Liſter* rightly Conjectures their Original to be from the Butter-fly, into which they are transformed, though he ſeems not to have taken Notice of the particular manner of their Propagation, as may be ſeen in *Numb.* 60. of his Edition of *Goedartius*. The Bearers of theſe Trees you know are full of Aſperities, and not ſo

ſmooth